Fig. 2 illustrates a 3-dimensional isometric view of one embodiment of the invention with heatsink 110 shown in exploded view. **Fig. 2** shows a plurality of electrical and optical components which enable transmission and reception of data at the OC-192 rate. Modulator/driver 130 is connected via semi-rigid coaxial cable 114 to external modulator 262. In one embodiment, modulator/driver 130 provides amplification of digital signals received from electrical components on PCB 100 and produces a 7 volt peak to peak signal which is received, via semi-rigid coaxial cable 114, by external modulator 262. In one embodiment, external modulator 262 is a commercially available titanium-diffused lithium niobate modulator. Distributed feedback (DFB) laser 250 is used in conjunction with external modulator 262 that incorporate gratings to compensate for the dispersion of the optical signals. In one embodiment, DFB laser 250 operates in the 1555-1560 nanometer range and produces 40 milliwatts minimum of optical output power.

a1

The paragraph beginning on Page 7, line 18, and ending on Page 7, line 24, is amended as follows:

Another feature of the present invention is that transmit and receive components are positioned in separate sections to improve isolation, thereby reducing noise. For example, in the embodiment shown in **Fig. 2**, receive components including 1:16 demultiplexer 210, 16:64 demultiplexer 220, and amplifier 222, are positioned on one side of PCB 100, while transmit components including 64:16 multiplexer, 16:1 multiplexer, and modulator driver preamp 240 are positioned on the other side of PCB 100.

a2

The paragraph beginning on Page 7, line 25, and ending on Page 7, line 28, is amended as follows:

Another feature of the assembly shown in **Fig. 2** is that components that are highly sensitive to temperature variations are positioned on PCB 100 so that they receive the largest volume and lowest temperature of cooling air. These components include, for example, modulator driver 130, and DFB laser 250.